Phrasing Homer
A Cognitive-Linguistic Approach to Homeric Versification

Mark Janse

Department of Linguistics, Ghent University, Belgium
Center for Hellenic Studies, Harvard University, United States of America

---

Anyone interested in the colometry or "inner metrics" of the Homeric hexameter is confronted with a wide variety of different approaches, favouring two-, three- or four-colon verses or any combination of these. This article builds on Egbert Bakker's interpretation of Homeric discourse as a succesion of intonation / information units (IUs). Its aim is to provide more secure cognitive-linguistic criteria for determining caesura positions and the resulting cola / IUs.

---

1. *Introduction*

Anyone interested in the colometry or "inner metrics" of the Homeric hexameter is bound on a long and frustrating quest.[1] It will be long because so much has been written about the divisions of Homeric verse and what exactly such divisions represent. It will be frustrating because the information found in the numerous handbooks and commentaries is often conflicting or even contradictory. Particularly frustrating is the question of where to place the caesura(e) and whether this should be done with or without regard to meaning.

Based on twenty-five years of experience in teaching courses on Homeric language and meter at Ghent University and the University of Amsterdam and in guest lectures and seminars on Homeric versification at numerous universities in Europe and North America, the present article discusses the linguistic criteria that can be used to determine caesura positions within the hexameter and consequently also the shape and content of the resulting cola, building on earlier work by Bakker (1990; 1997a; 1997b; 1999) and Janse (1990; 1993; 1998; 2003; 2014). The notation of caesura positions is based on the following scheme:[2]

---

[1] The bulk of this paper was written while I was an Associate of Harvard's Center for Hellenic Studies in 2019. I would like to thank the directors of the CHS, Gregory Nagy and Zoie Lafis, for the honour of the appointment and for the hospitality, leisure and infrastructure offered by the CHS which made the publication of this and several other articles possible. Preliminary versions have been presented at the bi-annual meeting of the Dutch classical linguists at Katwijk (2001), the Hellenistenclub at C.J. Ruijgh's house in Amsterdam (2003) and as guest lectures and seminars at the universities of Amsterdam (UvA), Athens, Berlin, Cambridge, Chicago, Göttingen, Groningen, Harvard, Leiden, Leuven, Manchester, Naples, Nijmegen, Ohio State, Oxford, Palermo, Princeton, Reading, Rome (Sapienza), Stanford and Thessaloniki. I am grateful to the various audiences as well as to the anonymous referees of *SO* and its the editor, Anastasia Maravela, for their helpful comments and suggestions.

[2] Abbreviations used: B = Bucolic diaeresis (4c), ConTop = Contrastive / New Topic, F = feminine or trochaic caesura (3b), Foc = Focus, GivTop = Given Topic, H = hephthemimeral caesura (4a), IS = information structure, IU = intonation / information unit, L-dislocated = left-dislocated, M = masculine or hepthemimeral caesura, PP = personal pronoun, R-dislocated = right-dislocated, ResTop = Resumed Topic, T = "trithemimeral" caesura (2a), Top = Topic, VB = verse-beginning, VE = verse-end.

$$^1- {}_{1a}\cup {}_{1b}\cup {}_{1c} {}^2- {}_{2a}\cup {}_{2b}\cup {}_{2c} {}^3- {}_{3a}\cup {}_{3b}\cup {}_{3c} {}^4- {}_{4a}\cup {}_{4b}\cup {}_{4c} {}^5- {}_{5a}\cup {}_{5b}\cup {}_{5c} {}^6- {}_{6a}- {}_{6c}$$

(Janse 2003, 347; cf. 1998, 138; 2014, 18)

The structure of this article is as follows: §2 briefly discusses the traditional colometrics, which will be referred to as the West Metric (§2.1), the Fränkel Metric (§2.2) and the Kirk Metric (§2.3), and their adoptions and adaptions in selected handbooks and commentaries (§2.4); the cognitive-linguistic approach to Homeric versification is presented in §3; the basic premises are outlined in §3.1; the linguistic criteria to determine caesura positions and the resulting cola, interpreted as intonation units, are discussed in §3.2; a summary of the results and some suggestions for further research are given in the conclusion (§4).

2. Colometrics

2.1. The West Metric

Martin West's *Greek Metre* (1982), *Introduction to Greek Metre* (1987) and "Homer's Meter"[3] (1997) are standard references in the Anglo-Saxon world.[4] West is a representative of what Bassett calls the "metrical theory of caesura", which in his time had "the greatest number of adherents" (1919, 345). The verse is considered to be a "continuous stream of sound" which is interrupted only at VE (1982, 5). It is generally subdivided into cola, a colon being defined as "a single metrical phrase of not more than about twelve syllables" (1982, 5). Greek poetry is based on a "stock of common cola" (*ibid.*). West notes that cola are sometimes integrated "seamlessly in the larger structure of [the verse]", but in other cases "the poet himself demarcates the cola by means of regular word-end (caesura) and relatively frequent syntactic division" (1982, 6). With respect to the hexameter in particular, he claims that "[s]entence- and phrase-structure is not closely tied to verse-structure, but not altogether independent of it" (1997, 224). This is an important claim which in *Greek Metre* is elaborated as follows:

> There is no requirement that syntactic segments should coincide with metrical segments, but they often do, and there is a strong tendency to avoid serious clashes between verbal and metrical phrasing. In some metres sense-pauses are largely confined to a few places in the line. (West 1982, 25)

The introduction of "sense-pauses" comes as a surprise in light of the technical definition of "pause" as "the interruption of synapheia by [verse]-end" (1982, 198).[5] Without giving any definition of what exactly counts as a "sense-pause", West nevertheless claims they are "practically confined to the following positions" (1982, 36; cf. 1997, 224):

$$^1- {}_{1a}\cup {}_{1b}\cup {}_{1c} {}^2- {}_{2a}\cup\cup {}^3- {}_{3a}\cup {}_{3b}\cup {}^4- {}_{4a}\cup\cup {}_{4c} {}^5- \cup\cup {}^6- - {}_{6c}$$

It is interesting to consider the percentage of lines in which such a sense-pause occurs according to West (1982, 36), in decreasing order of frequency: 6c (63%) > 3a (12%) > 4c (11%) > 3b (9%) > 2a (7%) > 1c (6%) > 4a (3%) > 1b (2%) > 1a (0.6%). Apart from the expected first place for 6c

---

[3] West (1997) is the author's only publication in which the American spelling *meter* is used.

[4] I had the fortune and, indeed, privilege to become closely acquainted with Martin West during my visiting fellowships at All Souls College in 2007 and 2014 and my regular visits in between. My critical remarks on his metrical theory do not in any way detract from his immense scholarship and learning.

[5] The idea that verses can have "sense-pauses" goes at least back to Hermogenes (2nd c. AD), who uses the phrase ἀνάπαυσις τῆς ἐννοίας on two occasions (*Id.* 1.9 & 2.10). More on sense-pauses in ancient treatises in Bassett (1919).

at VE, the relative order of the traditional caesurae at 3a (M), 3b (F) and 4a (H) is quite surprising in light of the fact that West accepts only these three as the metrical caesurae which define the structure of the hexameter (1982, 36; 1997, 220). Actually, 4a is only tolerated if 3a and 3b are bridged, because West claims that the hexameter as we know it is the result of the pairing of two cola belonging to the "common stock" (1997, 236):[6]

> Structurally […] the verse is better regarded as consisting of two cola, divided by the medial caesura. The cola $-\cup\cup-\cup\cup-$ (hemiepes, symbol *D*), $\times-\cup\cup-\cup\cup-$, and $\cup\cup-\cup\cup-\cup\cup-$ (paroemiac) occur independently in other metres. The essence of the hexameter can be expressed by the formula $D\,|\,\overset{|}{\cup}\,\overset{|}{\cup}\,D-\|$. Many of the repeated phrases of epic are designed to fill one or other colon. (West 1982, 35)

The automatic assignment of metrical caesurae at 3a and 3b has a number of unfortunate consequences, as acknowledged by West (1982, 36; 1997, 223). Occasionally, for instance, the caesura seems to fall after a prepositive such as οὐ (1), or before a postpositive such as ποτέ (2), both of which form an "accentual group" (1982, 5) with the following c.q. preceding orthotonic word (cf. §3.2.1):[7]

(1)   κλέπτε νόῳ, ἐπεὶ οὐ |₃ₐ παρελεύσεαι οὐδέ με πείσεις   *Il.* 1.132

(2)   ἤδη γὰρ καὶ δεῦρό |₃♭ ποτ' ἤλυθε δῖος Ὀδυσσεύς   *Il.* 3.205

Examples such as (1) and (2) are problematical, if they are seen as a serious clash "between verbal and metrical phrasing" (1982, 25). If, on the other hand, one assumes, as West does, that a caesura is not a pause in the technical sense of the word, neither prepositive οὐ nor postpositive ποτέ is separated from the orthotonic word with which they form an accentual group, the attachment being safeguarded by the synapheia between the words involved. More than occasionally, however, the caesura seems to depend on an elision (1982, 36; 1997, 223):

(3)   οὐλομένην, ἣ μυρί' |₃♭ Ἀχαιοῖς ἄλγε' ἔθηκεν   *Il.* 1.2

(4)   Ἕκτορ, σοὶ δὲ μάλιστ' |₃ₐ ἐπιτέλλομαι, ὧδε δὲ ῥέξαι   *Il.* 2.802

Here we hit on a problem of a theoretical nature: if caesura equals word-end, then the pre-caesural words should have been μυρία in (3) and μάλιστα in (4). The fact that the final short vowels are elided is a consequence of the synapheia of the verse, which means that there is, technically speaking, no word end at all, except at VE. The problem is even bigger in the following verse:

(5)   ὣς ἔφατ', ἔδδεισεν |₃ₐ? δ' ὁ |₃♭? γέρων καὶ ἐπείθετο μύθῳ   *Il.* 1.33

If we assume a caesura at 3a, the postpositive particle δέ is separated from ἔδεισσεν. If, on the other hand, we assume a caesura at 3b, the prepositive "article" (West 1982, 36) ὁ is separated from γέρων. The West solution would be, of course, to ignore the elision and place the caesura at 3a after δ' and before ὁ. A similar problem arises in the analysis of the following verse, where the final consonant of the pre-caesural word ἄναξ should be treated as belonging to the first syllable of the post-caesural word ἀνδρῶν:

---

[6] For an excellent survey and critique of attempts at reconstructing a "protohexameter" see Schoubben (2018, 63-83).
[7] Unless otherwise indicated, examples are quoted after West's editions of the *Iliad* and the *Odyssey*.

(6)   Ἀτρεΐδης τε ἄναξ |₃ₐ ἀνδρῶν καὶ δῖος Ἀχιλλεύς   *Il.* 1.7

        at-re-i-dēs-te-a-nak|₃ₐ-san-drōn-kai-dī-o-sa-khil-leus

As a matter of fact, this problem is compounded in cases like (4) and (7), where we have both an elision and the transfer of the remaining final consonant to the first syllable of the postcaesural words ἐπιτέλλομαι (4) and ὅς (7):

(7)   κλῦθί μευ, ἀργυρότοξ’, |₃ₐ ὃς Χρύσην ἀμφιβέβηκας   *Il.* 1.37

        klū-thi-me-u̯ar-gu-ro-tok|₃ₐ-shos-krū-sē-nam-phi-be-bē-kas

Another problem with the metrical theory of caesura is the fact that word-end at 3b often results in the closure of the pre-caesural syllable, as in the following example:

(8)   στέμματ’ ἔχων ἐν χερσὶν |₃ᵦ ἑκηβόλου Ἀπόλλωνος   *Il.* 1.14

This is in fact the opposite of elision, but again there is a conflict between the ideas of word-end on the one hand and synapheia on the other. If the first colon was indeed produced as well as perceived as a separate colon, the closure of the pre-caesural syllable would treat its final consonant "as belonging to the previous syllable and adding to its length" (1982, 8), which would of course result in an unmetrical hexameter.

        This is not just a theoretical problem, as the division of the hexameter in two cola has an important effect on the rhythm of the verse according to West:

> This regular incidence of caesura in the third foot effectively divides the verse into two not quite equal cola, differentiated by the feature that the first begins in 'falling' rhythm, the second in 'rising'. (West 1997, 223; cf. 1982, 19)

Without an audible pause or other prosodic features, it is hard to see how such a shift from "falling" to "rising" rhythm could be perceived (where the quotation marks suggest that the terms are based on metaphor rather than phonetics, whether articulatory, acoustic or auditory).

        Apart from the problems just mentioned connected with the potential conflict between word-end and synapheia, there is the more serious problem of the existence of "sense-pauses" and their interpretation, and the "clashes between verbal and metrical phrasing", as illustrated in examples (1) to (6).

2.2.   *The Fränkel Metric*

Hermann Fränkel's four-colon theory first appeared in 1926, a paper which remained largely ignored in the Anglo-Saxon world, with the notable exception of Porter (1951).[8] The completely revised version (1968) seems to be enjoying a revival in some form or other. Whereas West refuses to equate caesurae with sense-pauses, Fränkel does so unequivocally: "im griechischen hexameter [sind] die Sinnesgliederung der Rede und die rhythmische Folge der langen und kurzen Silben aufeinander abgestimmt" (1968, 103). Caesurae are defined as "die zur Binnengliederung des Verses benutzten Sinnesfugen" (1968, 111). Fränkel holds that every verse has not one but three caesurae, which can be weak or strong "je nach der Schärfe des Sinneseinschnittes" (*ibid.*). Not surprisingly, Fränkel's caesurae coincide with the sense-pauses identified by West, the ones

---

[8] In the German-speaking world, on the other hand, its reception was much more immediately favourable, cf. Korzeniewski (1968, 31) and Lesky (1968, 697-8).

between brackets being "verspätete Sinneseinschnitte" (1968: 107), also called "verspätete Zäsuren" (1968: 118), in cases where 2a or 4c is bridged by "ein schweres Wort" (1968, 108):

$$^1— _{1a} ^{\cup} _{1b} ^{\cup} _{1c} \quad ^2— _{2a} ^{\cup} _{(2b)} ^{\cup} _{(2c)} \quad ^3— _{3a} ^{\cup} _{3b} ^{\cup} \quad ^4— _{4a} ^{\cup\cup} _{4c} \quad ^5— _{(5a)} ^{\cup} _{(5b)} ^{\cup} \quad ^6— — _{6c}$$

The early caesurae in the first two feet are collectively referred to as the A-caesurae, those in the third foot as the B-caesurae and the late caesurae in the fourth foot as the C-caesurae. The obligatory quadripartite division turns each verse into a "Miniaturstrophe" (1968, 113). Fränkel considers cola the "genormte Bauglieder" of the hexameter, whose size and metrical shape is "naturgemäß abgestimmt" to the traditional formulae (*ibid.*).

The inspiration for the rigid quadripartite division must have come from Callimachus, whose name precedes Homer's in the title of the original paper (1926).[10] Homer certainly provides possible candidates as well, such as the following two, consisting of four formulae, the first of which is quoted by Fränkel (1968, 112):

(9)   ὣς ἔφατ' |$_{1c}$ εὐχόμενος· |$_{3a}$ τοῦ δ' ἔκλυε |$_{4c}$ Φοῖβος Ἀπόλλων   *Il.* 1.44

(10)   ὣς φάτο |$_{1c}$ δάκρυ χέων· |$_{3a}$ τοῦ δ' ἔκλυε |$_{4c}$ πότνια μήτηρ   *Il.* 1.357

However, the rigidity of Fränkel's quadripartite colometry results in concessions reminiscent of West's. Like the latter, Fränkel occasionally admits a caesura after proclitics, such as the negation οὐ in (1) – "der Sprecher kann immer, zu größerem Nachdruck, die Negation akzentuieren" (1968, 146):

(1')   κλέπτε νόῳ, |$_{2a}$ ἐπεὶ οὐ |$_{3a}$ παρελεύσεαι |$_{4c}$ οὐδέ με πείσεις   *Il.* 1.132

Fränkel's explanation or, rather, justification smacks of arbitrariness and circularity. In a similar vein, he explains away the separation of "postpositive" prepositions from their nouns by a putative caesura: "Für Postpositionen (nachgestelltes περί, ἀμφί u.ä.) legen die widerspruchsvollen Lehren der Grammatiker die Vermutung nahe, daß sie einem Nebenakzent trugen, der in der lebendige Sprache aufgehöht, aber ebensogut auch bis zum Verschwinden abgeschwächt werden köntte" (1968, 147), as in the following example:

(11)   οὐ γὰρ ἐγὼ |$_{2a}$ Τρώων |$_{3a}$ ἕνεκ' ἤλυθον |$_{4c}$ αἰχμητάων   *Il.* 1.152

The suggested sense-pauses in (11) are rather counter-intuitive, to say the least. This is also the main problem of the theory: Fränkel's caesurae are said to be "Sinneseinschnitte", but the resulting cola are not always clearly identifiable as semantic units. This is all the more remarkable as Fränkel himself suggests that cola are in fact *syntactic* units situated between the sentence and the word (1968, 103), with reference to the work of his namesake Eduard Fraenkel entitled "Kolon und Satz" (1933). Unfortunately, Fränkel does not provide a definition of what exactly constitutes a colon and which criteria can be used to identify one as such. Neither does he provide criteria for the placement of caesurae, which sometimes seem to be merely chosen because they happen to coincide with what he perceives as 'preferred' sense-pauses. The "delayed caesurae" are a logical consequence of his compulsive search for formalistic rules, but even Fränkel has to

---

[10] Compare, e.g., the caesurae / sense-pauses in the following verses (Fränkel 1968, 104): φέρβε βόας, |$_{2a}$ φέρε μᾶλα, |$_{3b}$ φέρε στάχυν, |$_{4c}$ οἶσε θερισμόν (*Cer.* 136); ὅς μιν ἴδῃ, |$_{2a}$ μέγας οὗτος· |$_{3b}$ ὃς οὐκ ἴδε, |$_{4c}$ λιτὸς ἐκεῖνος (*Ap.* 10).

admit that verses with bridged A or B caesurae may have three instead of four cola, as in the following example (*ibid.*):[11]

(12)   Χρυσόθεμις $|_{2a}$ καὶ Λαοδίκη $|_{4a}$ καὶ Ἰφιάνασσα   *Il.* 9.145

The three-colon verse is a type more commonly associated with the name of Geoffrey Kirk, whose metric will be discussed in the next section.

2.3.   *The Kirk Metric*

Kirk's original (1966) appraisal of Fränkel's four-colon theory, with reference to Porter's (1951) rhythmical interpretation of the latter,[12] is summarized in the first of his five-volume commentary on the *Iliad*:

> The cola are not […] units of meaning, although they tend to comprise organic word-groups; they are not units of composition exactly since the singer does not compose by marshalling first the first colon, then the second, and so on, although they are very much bound up with the act of composition and reproduction; still less are they reflections of archaic verse-forms. Rather they are a reflection of sentence-articulation as predisposed by a permanent rhythmical pattern – perhaps little more than that. (Kirk 1985, 19)

What distinguishes Kirk's approach from West's and Fränkel's is that his model allows three-colon verses, "a drastically neglected […] important minority" (1985, 19), in addition to four- and two-colon verses. The number of caesurae is reduced (1985, 18-20) and their positions coincide with the sense-pauses in Callimachus' rather than Homer's hexameter (West 1982, 153):

$$\overset{1}{-} \underset{1c}{\cup\cup} \overset{2}{-} \underset{2a}{\cup\cup} \overset{3}{-} \underset{3a}{\cup} \underset{3b}{\cup} \overset{4}{-} \underset{4a}{\cup\cup} \underset{4c}{} \overset{5}{-} \underset{}{\cup\cup} \overset{6}{-} \underset{6c}{-}$$

Kirk's addition of the three-colon verse as a regular alternative for two- or four-colon verses makes his approach the most flexible, but unfortunately as subjective as Fränkel's. The main reason is that Kirk is unable to avoid semantic and/or syntactic considerations when choosing between alternative options. Consider, for instance, the definition of the "rising threefolder" as a verse with "either no 'main' caesura or a semantically bridged one, and […] a strong fourth-foot caesura" (1985, 20). The third-foot caesura at 3a or 3b "tends to be absent from such verses, or semantically irrelevant, also" (*ibid.*). An example of a "semantically bridged threefolder" is (12) and two examples of threefolders with "semantically irrelevant" third-foot caesurae are the following (*ibid.*):

(13)   ἕζετ' ἔπειτ' $|_{2a}$ ἀπάνευθε νεῶν $|_{4a}$ μετὰ δ' ἰὸν ἕηκε   *Il.* 1.48

(14)   εἰ δὴ ὁμοῦ $|_{2a}$ πόλεμός τε δαμᾷ $|_{4a}$ καὶ λοιμὸς Ἀχαιούς   *Il.* 1.61

Kirk notes that both verses have word-end and thus a metrical caesura at 3b, but adds that it would be "absurd to phrase the verses so" (*ibid.*), as the caesura would separate ἀπάνευθε from νεῶν and πόλεμος from δαμᾷ. The separation would have been marked by a "noticeable phrasing-pause", but the "close grammatical link" shows that "there is no real pause, either expressed or

---

[11] The following verse from Callimachus with a bridged A caesura results in a "besonders harmonische Dreiteilung" (Fränkel 1968, 132): σύν τ' εὐαγορίᾳ $|_{3a}$ σύν τ' εὔγμασι $|_{4c}$ σύν τ' ὀλολυγαῖς (*Lav. Pall.* 139).

[12] Porter, to be sure, held that "although the colon is not in every case […] a unit of meaning, it is, nevertheless, normatively and essentially a unit of meaning" (1951, 22).

felt, in phrasing" (1985, 21). He does not explain, however, why a caesura at 2a is necessary, especially in (13), where it depends on an elision and a caesura at 4a by itself is an acceptable caesura even in the metrical theory. Likewise, we are not told why the following verse should be a "rising threefolder" rather than an ordinary two-colon verse or even a four-colon verse à la Fränkel (1985, 20):[13]

(15)   διογενὲς |₂ₐ Λαερτιάδη |₄ₐ πολυμήχαν᾿ Ὀδυσσεῦ   *Il.* 2.173

It would seem, then, that an interpretation of cola as metrical as well as semantic units is inevitable even for Kirk, as appears from his reference to the "complex interplay of verse and meaning" (1985, 21) and the following conclusion:

> It is clear that close attention to colometry, but always in relation to sense and syntax, can give important insights into the rhythmical structure of the individual verse and the phrasing of the individual sentence. (Kirk 1985, 24)

Kirk's final statement is also worth quoting in full, as it contains a cognitive appeal which will be elaborated further in section 3:

> Homeric poetry was composed to be *heard*, and […] hearing it more or less aright is a precondition of *understanding* it, in a way that does not depend on gross distortions of sound and language at the most basic levels. (Kirk 1985, 24)

2.4. *Adopted and Adapted Metrics*

The three colometrics just discussed are found in various forms and interpretations in the many recent handbooks and commentaries that are currently available. The following brief but representative selection is merely intended to show how confusing and often conflicting the provided information is, both for students and for teachers.

The *New Companion to Homer* (Morris & Powel 1997) contains West's chapter on "Homer's Meter" (1997), whose metric has been discussed in section 2.1. In his chapter on "The Study of Homeric Discourse", Bakker includes 2a and 4c in addition to the traditional caesurae at 3a, 3b and 4a (1997, 301). Fränkel's metric, on the other hand, is adopted in Russo's chapter on "The Formula" (1997, 240) and Edwards' chapter on "Homeric Style and Oral Poetics" (1997, 265). It would have been convenient if deviant colometries of the hexameter had been included or at least referred to in West's chapter.

The *Cambridge Greek and Latin Classics* include to date nine commentaries on selected books from the *Iliad* and the *Odyssey.* Five of these follow the West metric without further comment: Rutherford (1992, 81; 2019, 53), Steiner (2010, 39) and Bowie (2013, 27; 2019, 40). Garvie (1994, 31) and Graziosi & Haubold (2010, 12) add 4c. De Jong considers 3a and 3b as the "main caesurae", but accepts "additional word ends" at 1c or 2a and at 4a or 4c (2012, 35). The caesurae "contribute to the variety of Homeric versification", but de Jong does not inform us which combinations of caesurae are acceptable for her. The correspondence between metrical and semantic units is "a matter of debate", but there is "a close correspondence between formulas and the cola […] created by the caesurae" and cola "often correspond to syntactic units" (*ibid.*).

Macleod follows West in distinguishing caesurae (1982, 53) from sense-pauses (1982, 54), but notes that "metre and syntax are sensitively related" and stresses "the interplay of regularity and variety and the marriage of syntax and metre in Homer's verse" (*ibid.*). He distinguishes

---

[13] Fränkel considers this particular instance as a three-colon verse with a bridged third-foot caesura but without a "delayed" fifth-foot caesura at 5a (1968, 127-8).

verses "which fall naturally into two parts" from those "which fall naturally into three parts", but admits that any interpretation is necessarily "subjective" (*ibid.*). He compares the "lively variety of metrical patterns from line to line" in particular passages as opposed to the "regularity" in others (1982, 55) and concludes that it is the "flexibility" of the Homeric hexameter which defines its "wealth and beauty" (1982, 56).

The *Basler Kommentar* has a separate volume of *Prolegomena* (Latacz 2009) with a brief chapter on "Homerische Metrik" by René Nünlist, who simply notes, with reference to the Fränkel metric: "Jeder Vers enthält eine B- (über 98% aller Verse) oder eine C1-Zäsur. Viele Verse verfügen über mehrere Zäsuren (aber höchstens je eine A-, B- und C-Zäsur)" (2009, 112). The distinction between metrical caesurae and sense-pauses is referred to in a footnote (2009, 112 n. 10): the former is obligatory but can be bridged metrically, as in example (15), the latter is optional and can be bridged semantically, as in examples (13) and (14).[14] All this would seem congenial with Kirk's model, but Nünlist is reluctant to apply the notion of "rising threefolder" to (13) and (14), precisely because they are bridged semantically, but not metrically (*ibid.*).

The *Cambridge Companion to Homer* (Fowler 2004) contains a long chapter by Matthew Clark on "Formulas, Metre and Type-Scenes". Clark seems to follow Kirk in that he accepts two-, three- and four-colon verses, although he asserts that "the Homeric hexameter strongly tends to divide into four sections, called cola [which] are determined by word and sense boundaries within the line" (2004, 120). How the reader has to determine the sense boundaries is rather vague. Clark insists that in many verses there is a "clear division in the sense and the syntax" which is "most easily seen when this sense division is strong enough to deserve punctuation" (2004, 121). "Even when there is no punctuation, it is often possible to feel the division in the sense" (*ibid.*). Unfortunately, the punctuation is not Homer's but the editor's or at best a scribe's, although in most cases it is indeed based on syntactic divisions, however interpreted. What are we to do in cases where there is no punctuation, but we nevertheless "feel the division in sense"? In my experience, students and teachers have a hard time justifying their "feelings" on linguistic and even on contextual grounds.

The *Homer Encyclopedia* (Finkelberg 2011) has a very short entry on "Caesura" by Haug, who seems to be following West in his definition as "a break in the hexameter where word-end often occurs" and the prevalence (98%) of third-foot caesurae at 3a and 3b which, when bridged, "invariably" result in a caesura at 4a (2011, 149). In addition, Haug includes as "other possible caesurae" T at 2a and B at 4a (*ibid.*). He provides no information as to how caesurae should be determined or whether combinations of caesurae are possible, but notes the "close relationship between caesurae and formulae" (*ibid.*).

Edwards' entry on "Meter", on the other hand, hails Fränkel's article (1968) as "seminal" and informs us that caesurae may occur "in different positions" (according to Fränkel's metric, that is), "or may be omitted altogether", resulting in a "very flexible" verse rhythm (2011, 518). Again, no criteria are provided to determine how this flexibility operates in actual practice, but the interplay of metrical and verbal phrasing is duly emphasized:

> This articulation of the verse into two, three or four 'cola' […], besides giving variation in rhythm, also allows for emphasis on sentence structure, as phrases and sentences may begin and end at caesural points as well as at the end of a verse. (Edwards 2011, 518)

Edwards also points out the importance of this articulation for the formulaic language of epic poetry, because formulae "begin and end at caesural points and so can be readily fitted together within the structure of the verse" (2011, 518-9). Lastly, and very importantly, the "fitting together" is associated with the idea of intonational phrasing with reference to the work of Bakker

---

[14] The German terms used by Nünlist are "metrische Zäsur" vs. "rhetorische Pause" and "rhythmische und rhetorische Überbrückung" (2009, 112[10]).

to be discussed in the next section: "The cola also tend to correspond to the 'intonation units' into which modern discourse analysis divides ordinary speech" (2011, 519).

3.   *A Cognitive-Linguistic Approach to Homeric Versification*

3.1.   *Cola as Intonation / Information Units*

The study of Homeric discourse has taken a decisive turn since the work of Egbert Bakker (1990; 1993; 1997a; 1997b; 1999). Inspired by the seminal analysis of spoken language of Wallace Chafe, Bakker applies the theory of what the former would later call "thought-based linguistics" (2018) to Homeric discourse, which he views "not as oral poetry but as special speech" (1997a, 17).[15] It would seem, then, that Bakker considers the Homeric epics as "oral-derived texts" in the sense of Foley (2011, 603):

> If [the Homeric] text, a transformation of speech into a different medium, owed its existence to speech and voice, then its reading was nothing other than the reversal of this process: the transformation of text back into the medium of speech, the reenactment of the speech represented by the text. It appears, then, that not only the distinction between speaking and writing, but also the one between writing and reading, begins to break down: if speaking is a matter of cognition, of the activation of ideas in a speaker's consciousness […], then reading is a matter of the re-cognition and reactivation of those same ideas, both in the reader's and in the listeners' consciousness. (Bakker 1997a, 30)

An "idea" is here understood as a "focus of consciousness […] containing the information that is activated in a person's mind at a given moment" (1997a, 45). Each "idea" is verbalized as an "intonation unit", i.e. a speech segment characterized by a coherent prosodic contour, often but certainly not necessarily followed by a pause. Each IU represents a single "focus of consciousness":

> It is through this dynamic process of successive activations [of intonation units], first for the speaker and then, through the utterance of an intonation unit, for the listener, that language is able to provide an imperfect bridge between one mind and another. (Chafe 1994, 63)

Halliday, whose work on "information structure" (IS) is very congenial with Chafe's, uses the terms "tone unit" and "information unit" (1967, 200), the former referring to the form, the latter to the content of the unit. In the remainder of this article, I will use the acronym IU, which stands for Intonation / Information Unit.

Bakker's analysis of Homeric poetry is based on the assumption that the "flow of discourse" is a "progression of cognitively determined speech units" (1997a, 148). This "cognitive flow" determines the "rhetoric of the Homeric hexameter" (*ibid.*), "each metrical colon being the verbalization of a single idea" (1997a, 50). A colon is, in other words, the metrical equivalent of an IU.[17] It cannot be overemphasized that Homeric poetry was meant to be heard and not to be read, and that "hearing it more or less aright is a precondition of *understanding* it" (Kirk 1995, 24, quoted in §2.3). Bakker rightly observes that the "emphasis on composition has led scholars to neglect the importance of reception in the creation of the Homeric poems" (1997a, 24). In producing the hexameter as a succession of IUs, the performer, whether ἀοιδός or ῥαψῳδός,

---

[15] Bakker's concept of "special speech" is comparable to Nagy's "marked speech" (2004, 140).

[17] Cf. Janse (1998, 141; 2014, 23), whose conclusions are partly based on his prosodic interpretation of Wackernagel's Law (1990; 1993); see also Slings (1999).

"deconstructs" his own "flow of thought" for the audience and by doing so allows them to "reconstruct" it by connecting the successive IUs in their minds.[18]

It is not surprising that Eduard Fraenkel uses the term "Kolon" in a series of publications on "Kolon und Satz" (1932; 1933; 1965). As appears from the subtitle, Fraenkel is concerned with the "Gliederung des Satzes", of which the "Kolon" is a "kleinere Einheit, die in mehrfacher Hinsicht ein Abbild des Satzes ist" (1933, 319). Fraenkel's "Kolon" is in fact the pre-theoretical equivalent of an IU, which he successfully applies to the analysis of Ancient Greek and Latin, prose as well as poetry.[19] It is interesting to observe that Fraenkel's conclusions largely coincide with the findings of modern linguists such as Chafe and Halliday: a clause (Fraenkel's "Satz") may contain one (1) to *n* IUs, "where *n* is the number of ultimate constituents in the clause" (Halliday 1967, 201). Bakker confirms this for Homeric discourse: "In terms of syntax, intonation units can be anything from complete clauses to all kinds of nonclausal elements" (1997a, 48-9). As will become clear in the next section, IUs may be coextensive with syntactic units such as clauses, noun phrases or prepositional phrases, but not necessarily. It is one of the peculiarities of Ancient Greek, that IUs may contain words which are not syntactically connected.[20]

3.2. *Κωλοσκοπία: Identifying Cola as IUs*

The purpose of this section is to provide operational criteria which will help to establish a more secure basis for identifying cola as IUs. Bakker already discussed, with special reference to Homer's λέξις εἰρομένη or "strung-on style" (1997a, 36-9), several such criteria, which have been supplemented with others in my earlier publications (1998, 141-9; 2014, 24-33). They will be separately addressed in the following sections and supplemented with an additional few new ones.

3.2.1. *Postpositives, Prepositives and Preferential Words*

Postpositives, including enclitics, attach themselves to a preceding word and normally appear in second position (P2), P2 referring to the clause ("Satz") according to Wackernagel (1892), to the IU ("Kolon") according to Fraenkel (1932; 1933; 1965).[21] Postpositives are thus boundary markers in that they mark an IU's left boundary, as Fraenkel already pointed out (1933, 94).[22] P2 is a relative term, as several postpositives may cluster together in P2 in a more or less fixed order in Homer (Ruijgh 1990, 223-4). The word in first position (P1) may be preceded by a prepositive to form an accentual group together with the postpositive, but a postpositive may also attach directly to a prepositive (Dover 1960, 14-6). Postpositives in the examples already quoted include the connective particle δέ, which is "the most widely used linguistic boundary marker between foci of consciousness" (Bakker 1997a, 63). Consider the following examples (postpositives printed in boldface):[23]

(16a)   πολλὰς **δ'** ἰφθίμους ψυχὰς Ἄϊδι προΐαψεν

   b   ἡρώων |₂ₐ αὐτοὺς **δὲ** ἑλώρια τεῦχε κύνεσσιν

   c   οἰωνοῖσί **τε** πᾶσι |₃ᵦ Διὸς **δ'** ἐτελείετο βουλή   *Il.* 1.3-5

(17a)   εἵλκετο **δ'** ἐκ κολεοῖο μέγα ξίφος |₄c ἦλθε **δ'** Ἀθήνη

   b   ἄμφω ὁμῶς θυμῷ |₃ₐ φιλέουσά **τε** |₄c κηδομένη **τε**   *Il.* 1.195-6

---

[18] The deconstruction-reconstruction terminology is taken from Janse (1998, 150; 2014, 34).

[19] For the reinterpretation of Fraenkel's "Kola" as IUs see Janse (1990; 1993) and especially Scheppers (2011).

[20] See also Janse (forthcoming).

[21] Representative definitions of "prepositives" and their positional characteristics are given by Dover (1960, 12-3), van Emde Boas [et al.] (2019, 703-6).

[22] For Homer in particular see Ruijgh (1990), Bakker (1997a, 61-72), Janse (1998, 142-5; 2014, 24-8), Bertrand (2010, 356-83).

[23] From now on punctuation marks will be omitted from the examples.

Note the position of δέ in P2 at verse-beginning (VB) in (16a) and (17a), after T (2a) in (16b), F (3b) in (16c) and B (4c) in (17a) and, similarly, the position of τε in P2 at VB in (16c), after M (3a) in (17b) and again after B (4c) in (17b). The postpositives thus mark IU boundaries at traditional caesura positions which coincide with "sense-pauses" demarcating, in these cases, self-contained syntactic units. It should be noted, however, that the postpositives only mark the *left* boundaries of the IUs, not their *right* boundaries which, in the case of (16a) and (16b), are marked by an intonational pause at VE, resulting in two consecutive "adding enjambements" in the following lines.

Prepositives, including proclitics, attach themselves to a following word and "never, or only in certain specifiable circumstances, end a clause" (Dover 1960, 13).[24] The "category" of prepositives is a mixed bag, including articles, prepositions, negatives,[25] specific connective particles, subordinators and relative pronouns. Some of these introduce a clause, whether coordinate or subordinate, and hence can be seen as left-boundary markers as well. Consider the following examples (pre- and postpostives printed in boldface):

(18a)   **ἀλλ'** ἄγε **δή τινα** μάντιν ἐρείομεν |₄c **ἤ'** ἱερῆα
   b   **ἢ καὶ** ὀνειροπόλον |₃a **καὶ γάρ τ'** ὄναρ |₄c **ἐκ** Διός **ἐστιν**
   c   **ὅς κ'** εἴποι |₂a **ὅ τι** τόσσον ἐχώσατο Φοῖβος Ἀπόλλων
   d   **εἴ ταρ** |₁b ὅ γ' εὐχωλῆς ἐπιμέμφεται |₄c **ἠδ'** ἑκατόμβης   *Il.* 1.62-5

(19a)   **οὔτ' ἄρ'** |₁b ὅ γ' εὐχωλῆς ἐπιμέμφεται |₄c **οὐδ'** ἑκατόμβης
   b   **ἀλλ'** ἕνεκ' ἀρητῆρος |₃b **ὃν** ἠτίμησ' Ἀγαμέμνων
   c   **οὐδ'** ἀπέλυσε θύγατρα |₃b **καὶ οὐκ** ἀπεδέξατ' ἄποινα   *Il.* 1.93-5

Note especially the positions of ἤ and ἠέ, at VB in (18b) and after B (4c) in (18a); those of οὐδέ at VB in (19c) and after B (4c) in (19a); those of the relative pronouns at VB and after T (2a) in (18c), after F (3b) in (19b); those of the connective particles ἀλλά at VB in (18a), καί after F (3b) in (19c) and ἠδέ after B (4c) in (18d). The positions of the postpositives in the above examples confirm the phrasing into IUs (and οὐδέ, οὔτε and ἠδέ are, of course, lexicalised combinations of pre- and postpositives).

There is yet a third "category" of words which may be seen as boundary markers, labeled "preferential words" by Dover and defined as words which are "disproportionally common at the beginning of a clause" (1960, 20). Such words may be called first-position (P1) words, with the already noted caveat that prepositives may precede P1 words to form an accentual group with the latter.[26] Dover (1960, 21) provides a provisional list of preferential words, the following of which deserve special mention:[27] interrogatives; emphatic personal pronouns; demonstrative pronouns and their correlative adjectives and adverbs; differential pronouns (ἄλλος, ἕτερος); quantitative adjectives (especially πολύς). Dover's qualification "disproportionally common" indicates that preferential words cannot be considered P1 words in any absolute sense. The so-called emphatic personal pronouns probably constitute the most (in)famous example, as argued convincingly by Dik in her paper on "unemphatic 'emphatic' pronouns", in which she studies the "postpositive behavior" (2003, 537) of ἐγώ and σύ. In actual practice, it is relatively easy to distinguish the

---

[24] Cf. van Emde Boas [et al.] (2019, 703-4, 706-7).

[25] Dover refuses to treat the "simple negative" as a prepositive since "it may constitute a complete utterance by itself" and since "the types of clause in which it may appear last are numerous" (1960, 14). Van Emde Boas [et al.], on the other hand, include both οὐ and μή in their list of prepositives (2019, 704). Because the exceptions mentioned by Dover are easily identified, I include negatives among the prepositives.

[26] The order of prepositives and postpositives vis-à-vis preferential and other mobile words is actually more complicated, cf. Dover (1960, 16-9), van Emde Boas [et al.] (2019, 704-7).

[27] Adding that he had no doubt that "further enquiry would substantially enlarge the list" (1960, 21).

"preferential" (P1) from the "postpositive" (P2) behaviour, especially if preferential words are accompanied by pre- and/or postpositives to form an accentual group. The boundary marking function of interrogatives can be illustrated with the following examples:

(20)   **τίς** γῆ; |2a **τίς** δῆμος; |3a **τίνες** ἀνέρες ἐγγεγάασιν;   *Od.* 13.233

(21)   ὦ ξεῖνοι |2a **τίνες** ἐστέ; |3b **πόθεν** πλεῖθ' ὑγρὰ κέλευθα;   *Od.* 9.252

Note that all the interrogatives appear in clause-initial position, but at various positions in the verses: after T (2a) in both (20) and (21), after M (3a) in (20) and after F (3b) in (21). The following examples involve both emphatic and unemphatic personal pronouns:

(22a)   ὦ φίλ' |1b **ἐγὼ μὲν** ὅδ' εἰμί |3b **σὺ δ'** ἴσχεο |4c εἰπὲ **δὲ** πατρί
    b   **μή με** περισθενέων |3a δηλήσεται ὀξέϊ χαλκῷ   *Od.* 22.367

(23a)   **μή μιν** |1b **ἐγὼ μὲν** ἵκωμαι ἰών |4a **ὃ δέ μ' οὐκ** ἐλεήσει
    b   **οὐδέ τί μ'** αἰδέσεται |3a κτενέει **δέ με** γυμνὸν ἐόντα   *Il.* 22.123

Note the clause-initial positions of the emphatic personal pronouns ἐγώ after the vocative (1b) and σύ after F (3b), with the postpositive particles γάρ and δέ attached to them in P2, in (22a), as opposed to the position of the unemphatic personal pronoun με in P2 after the prepositive negative μή in (22b). In (23a), however, ἐγώ does not appear in clause-initial position, although it contrasts with ὅ in the following clause, the contrast being marked again by μέν c.q. δέ, but is preceded by what Fraenkel calls a "Kurzkolon" (1933, 99), i.c. μή μιν.[28]

It is very important to emphasize that I have so far used prepositives, postpositives and preferential words merely as boundary markers without justifying the plausibility of the resulting IUs as *information* units. If the flow of Homeric discourse is indeed based on a "progression of cognitively determined speech units" (Bakker 1997a, 148, quoted in §3.1), i.e. a concatenation of "strung-on" IUs, then we need to show how these IUs and their constituent words relate to the IS of the discourse. This is exactly what I have in mind in the following section.

3.2.2.   *Word Order and Information Structure*

Greek word order studies after Dover (1960) have greatly benefitted from the foundational work of Dik (1995; 2007), Matić (2003), Allan (2014) and, with special reference to Homeric Greek, Bertrand (2010).[29] The canonical IS of the clause proper can be represented as follows (van Emde Boas [et al.] 2019, 711):

(ConTop) – Narrow Focus – Verb – (GivTop) – (Rest)

Topic refers to the "presupposed information", focus to the "asserted information" of the clause.[30] Topics are either "given" (GivTop) or "contrastive / new" (ConTop) depending on whether or not they are predictable from and/or active in the preceding context. This particular formula represents the so-called "narrow-focus" clause, where the focus is a single constituent. The narrow-focus clause has to be distinguished from the "broad-focus" clause, where the focus

---

[28] On the reality of such "Kurzkola" as IUs see Fraenkel (1965, 41-9, especially p. 46 on combinations of prepositive negatives with postpositives) and Scheppers (2011, 12-3).

[29] The current state of Greek word order studies is conveniently summarized in van Emde Boas [et al.] (2019, 701-21).

[30] For terminology and more extensive definitions see Matić (2003, 578-9), Dik (2007, 26-40), Allan (2014), van Emde Boas [et al.] (2019, 709-21).

includes the verb and one or more other constituents. The latter type can be represented as follows (van Emde Boas [et al.] 2019, 712):

(ConTop) – Broad Focus I = Verb – (GivTop) – Broad Focus II – (Rest)

In addition to the obligatory clause, three optional extra-clausal IUs are distinguished:

[Theme] | [Setting] | Clause | [Tail]

Theme is a left-dislocated GivTop called "resumed topic" (ResTop) by Allan, because it "re-establish[es] topical referents into the discourse which have been out of the focus of attention for a while" (2014, 4). However, as van Emde Boas [et al.] note, "themes are not always easy to distinguish from contrastive / new topics" (2019, 718), which probably stands for "contrastive topics", as these can be given/resumed as well. Tail is a right-dislocated GivTop, which serves as an "afterthought, further specification, or correction" (Dik 2007, 35). Settings are pre-posed adverbial phrases or clauses providing a "coherence bridge between the preceding and the following discourse" (Allan 2014, 4). Settings typically provide information which "is not previously given, yet has to be considered as presupposed" (Dik 2007, 37). Whenever a setting consists of an adverbial clause, it has an IS like any other clause. This implies that the topic of a setting, if expressed, is always a postverbal GivTop (Allan 2014, 20-1).

　　With respect to Homeric discourse, themes have been recognized by Ruijgh (1990, 229-31), Bakker, who uses the terms "theme" as well as "left-dislocation" (1990, 10-7; 1997a, 100) and Bertrand, who uses the French equivalent "thème" (2010, 90). Tails are not taken into account by Ruijgh (1990) as opposed to Bakker, who uses the term "right-dislocation" (1990, 10-7), and Bertrand, who prefers "coda" (2010, 90). By way of illustration, consider the following passage from the *Odyssey*:

(24a) 　**ἦ δ' ἄρ'** ἐπ' ὀφρύσι νεῦσε |₃ᵦ νόησε **δὲ** δῖος Ὀδυσσεύς
　　b　ἐκ **δ'** ἦλθεν μεγάροιο |₃ᵦ παρὲκ μέγα τειχίον αὐλῆς
　　c　στῆ **δὲ** πάροιθ' αὐτῆς |₃ₐ **τὸν δὲ** προσέειπεν Ἀθήνη　　　　*Od*. 16.164-6

Athena, who had been absent from the storyline since the beginning of book 15, reappears *nominatim* (155), unnoticed to Telemachus (160), but not to Odysseus and the dogs (162). The IUs of the following lines are clearly demarcated by the repeated boundary marker δέ. The IS of the three lines is as follows. The first IU of (24a) starts with a ConTop, ἦ δέ (Athena), marking a topic as well as a subject shift, followed by a preverbal narrow focus ὀφρύσι,[31] specifying the nature of the gesture.[32] The second IU (24a) starts with the verb νόησε, which is the focus of the clause, as it signals the (positive) response of Odysseus to Athena's gesture. The juxtaposition of the quasi-homophonous responsive verbs ἐκ … νεῦσε and νόησε would have sufficed to indicate the subject shift from Athena to Odysseus, which is why the noun-epithet (or rather, epithet-noun) formula δῖος Ὀδυσσεύς is added as a postverbal GivTop. Odysseus continues to be the subject of verbs ἐκ … ἦλθεν (24b) and στῆ (24c), which constitutes a broad focus clause with πάροιθ' αὐτῆς. The fourth IU (24b) is an uncommon speech introduction,[33] which starts again with a ConTop, τὸν δέ (Odysseus), followed by the verb and a postverbal GivTop. Ἀθήνη is presented as a

---

[31] The phrase ἐπ' ὀφρύσι νεῦσε is formulaic (*Il.* 1.528, 9.620, 17.209, *Od.* 21.431; cf. *Od.* 9.468).

[32] That is, nodding with the brows (*passim*) instead of the head (κεφαλῇ, *Od.* 16.283; κάρητι, *Il.* 15.75); compare κατανεύω, with κεφαλῇ (*Il.* 1.524, 1.527) or more commonly without (*passim*). As Hoekstra notes in his commentary, the phrase here does not imply "emphatic assent" (Heubeck & Hoekstra 1989, 272).

[33] The only comparable speech introduction is: ὁ δὲ προσέειπεν ἄνακτα (*Od.* 14.36); see Edwards (1970) for formulaic speech introductions.

GivTop, because the ConTop τὸν δέ (Odysseus) in combination with the verb προσέειπεν would have sufficed to indicate the subject-shift.

If we now reconsider example (2), here repeated as (25b), a different analysis imposes itself. The context is the Τειχοσκοπία. Upon seeing Odysseus, Priam asks Helen who he is. When she reveals his name and character, Antenor (present on the scene and mentioned *nominatim* at 3.148) responds with the following words:

(25a) ὦ γύναι |₁c ἦ μάλα τοῦτο ἔπος |₄a νημερτὲς ἔειπες
   b ἤδη γὰρ |₂a καὶ δεῦρό ποτ' ἤλυθε |₄c δῖος Ὀδυσσεύς
   c σεῦ ἕνεκ' ἀγγελίης |₃a σὺν ἀρηιφίλῳ Μενελάῳ   *Il.* 3.204-7

The first IU of line (25a) is an initial vocative, as in (22a), on which more below. The second IU starts with the prepositive particle ἦ (Dover 1960, 13) in the very frequent collocation ἦ μάλα (LSJ *s.v.* μάλα 2), which is always placed at the beginning of an IU in Homer,[34] and is here followed by a ResTop, τοῦτο ἔπος, referring back to the words just uttered by Helen (200-2). The next IU starts after H (4a) with a preverbal focus νημερτές and the verb ἔειπες which merely repeats the content of ἔπος in the preceding IU. The second line starts with a setting ἤδη γάρ, followed by a preverbal focus καὶ δεῦρο ποτ', an adverbial phrase of which the adverb δεῦρο is marked as IU-initial by the prepositive adverbial particle καί and the postpositive indefinite adverb ποτε, followed by the motion verb ἦλθε, the meaning of which was already anticipated by the directional adverb δεῦρο. The line again ends with the formula δῖος Ὀδυσσεύς as a separate IU after B (4c), as in (24a). The third line consists of two IUs, each containing a prepositional phrase. The first of these starts with a preferential word: the emphatic personal pronoun σεῦ, used by Antenor to emphasize the fact that Odysseus is here for the second time because of Helen.

In the same vein, example (4) can now be reanalyzed as a three- instead of a two-colon verse, demarcated by the boundary marker δέ in the second and third IU. Iris, in the guise of Polites, addresses the latter's father Priam, but halfway her speech turns to Hector:

(4')   Ἕκτορ |₁c σοὶ δὲ μάλιστ' ἐπιτέλλομαι |₄c ὧδε δὲ ῥέξαι   *Il.* 2.802

The IS of the second IU is perfectly clear: σοὶ δέ is a ConTop, μάλιστα a preverbal focus, just as ὧδε in the third IU, where the adverb has precedence over the imperatival infinitive ῥέξαι.

So far, nothing has been said about the information status of vocatives. A distinction has to be made between fronted vocatives such as Ἕκτορ in (4'), ὦ ξεῖνοι in (21), ὦ φίλ(ε) in (22a), ὦ γύναι in (25a) and delayed vocatives such as ἀργυρότοξ(ε) in (7) and θεά in (26):

(26)   μῆνιν ἄειδε θεά |₃a Πηληϊάδεω Ἀχιλῆος   *Il.* 1.1

As I have argued elsewhere (Janse 1998, 144; 2014, 27),[35] vocatives in Homeric discourse are fronted when the speaker wants to attract the attention of the addressee, but delayed when the speaker already has the addressee's attention.[36] Fronted vocatives appear in pre-clausal position, typically at the beginning of a speech, whereas delayed vocatives appear either in post- or in intra-clausal position. In addition to the difference in placement, there is a difference in intonation: fronted vocatives constitute a separate IU, as is shown by the position, in the following IU, of

---

[34] Except, of course, in subordinate clauses, e.g. ἐπεὶ ἦ μάλα πολλὰ πέπασθε (*Od.* 10.465; cf. *Od.* 1.56).

[35] See also the in-depth discussion by Bertrand (2010, 261-71).

[36] In an oft-cited paper by Zwicky, fronted vocatives are labelled "calls", delayed vocatives "addresses": "calls are designed to catch the addressee's attention, addresses to maintain or emphasized the contact between speaker and addressee" (1974, 787). Similarly, Lambrecht describes the function of a vocative "to call the attention of an addressee, in order to establish or maintain a relationship between this addressee and some proposition" (1996, 267).

postpositives such as δέ in (4') and μέν in (22a), prepositives such as ἦ (μάλα) in (25a) or preferential words such as τίνες in (21).

Delayed vocatives, on the other hand, behave as postpositives and are included in the preceding IU. Schwyzer correlates this with the accentuation of the vocative: "Die Zurückziehung des Akzentes in einigen Vokativformen […] hangt mit der Erststellung des Vokativs zusammen; in dieser hatte der Vokativ selbständigen Akzent, bei Nachstellung schloß er sich dem vorhergehenden Wort akzentuell an" (1950, 60). This means that the traditional M caesura (3a) in the opening line of the *Iliad* (26) coincides with an IU boundary. It also implies that the comma preceding a delayed vocative does not reflect any intonational reality, but is merely based on modern (Western) punctuation rules. Lambrecht (1996, 278) compares delayed vocatives with postverbal given topics in terms of IS.

Delayed vocatives are often used at the beginning of a ritual speech, typically an invocation, when the speaker assumes that s/he already has the attention of the god(dess) invoked. This is the case, for instance, of a dedicated priest such as Chryses (7). An initial invocation to the Muse(s) is, of course, conventional for epic poems and literary hymns. Taking a closer look at the IS of (26), it should be noted that the first IU consists of a narrow-focus clause and a delayed vocative. It is important to note that the verb ἄειδε is an imperative, which is a preferential word not mentioned by Dover.[37] The imperative has ceded its P1 to the preverbal focus μῆνιν,[38] which is of course "das eigentliche Thema des Epos" (Latacz [et al.] 2000, 12) which "will persist throughout the entire poem" (Kirk 1985, 51). As Latacz [et al.] note: "Die Anfangsstellung des Themaworts (wohl schon in der *oral poetry* traditionell) verfestigt sich nachiliadisch zur auch *literarischen* Tradition" (2000, 13-4). Compare, e.g., ἄνδρα μοι ἔννεπε Μοῦσα (*Od.* 1.1), Ἑρμῆν ὕμνει Μοῦσα (*h. Herm.* 1), Ἄρτεμιν ὕμνει Μοῦσα (*h. Dian.* 1) etc.[39] The preferential status of imperatives is perhaps best illustrated with the almost exclusive placement at VB of the grammaticalized imperative ἄγε in the "Aufforderungsformel" (Latacz [et al.] 2000, 52) ἀλλ' ἄγε (δή) in (18a). Compare further κλῦθι μευ in (7) and κλέπτε νόῳ in (1), the latter repeated here as (27b), as the colometry of the line was variously interpreted by West (§2.1) and Fränkel (§2.2):

(27a)   **μὴ δὴ** οὕτως |₂ₐ ἀγαθός **περ** ἐὼν |₄ₐ θεοείκελ' Ἀχιλλεῦ
   b   **κλέπτε** νόῳ |₂ₐ **ἐπεὶ οὐ** παρελεύσεαι |₄c **οὐδέ με** πείσεις   *Il.* 1.131-2

The first IU of (27a) is a "Kurzkolon" like μή μιν in (23a) which functions as an emphatically negated setting, followed by a new IU consisting of a participial clause and demarcated by the postpositive particle περ, which in turn is followed by a formulaic noun-epithet (or rather epithet-noun) vocative, which for this very reason has to be treated as a separate IU, even though it is a delayed vocative.[40] The second line (27b) is not a two-colon verse, as West would have it (1), or a four-colon verse, as Fränkel would have it (1'), but a three-colon verse. The first IU starts with the preferential imperative κλέπτε, which is thus separated by one line from its negation μή and the adverb οὕτως. The boundaries of the second and third IU are demarcated respectively by the prepositive subordinator ἐπεί and the prepositive coordinator οὐδέ in combination with the postpositive non-emphatic pronoun με. More on vocatives and imperatives in the conclusion.

4.   *Conclusion*

---

[37] On the preferential status of imperatives in Homer see Janse (1998, 143; 2014, 26); compare Latacz [et al.] ad *Il.* 1.1: "Die normale Wortstellung wäre auch im Griechischen 'Imperativ-Objekt'" (2000, 13). The preferential status of imperatives is the reason why in Modern Greek clitic pronouns are still enclitic on imperatives, but proclitic on finite verbs (Janse 2000, 247-8).

[38] Compare the position of the imperatival infinitive ῥέξαι in example (4').

[39] The only exception is Μοῦσά μοι ἔννεπε ἔργα |₃ᵦ πολυχρύσου Ἀφροδίτης (*h. Ven.* 1), where ἔργα μοι ἔννεπε Μοῦσα would have been perfectly possible and the attachment of the enclitic pronoun μοι to the fronted vocative is unusual.

[40] Formulaic epithet-noun vocatives can be complex, e.g. Ἀτρεΐδη κύδιστε |₃ᵦ ἄναξ ἀνδρῶν Ἀγάμεμνον (*passim*).

The aim of this paper was to provide cognitive-linguistic criteria to determine the colometry of the Homeric hexameter in light of recent analyses of Homeric discourse as a succession of "strung-on" intonation / information units (IUs). Although various colometrics have been proposed, ranging from two-, three- and four-colon verses and combinations thereof (§2), the student of Homeric epic is generally left on her or his own to decide how and where to place caesurae and consequently how to divide the hexameter in cola – and how many. To reduce subjective, arbitrary and circular arguments to a minimum, I have tried to base myself exclusively on linguistic criteria related to word order and always with due attention to the linguistic context (§3). For this purpose, I used the classification introduced by Dover (1960) to distinguish prepositive, postpositive and preferential words. Because of their word order preferences, such words may be seen as boundary markers which demarcate the left or in some cases the right boundary of an IU. Postpositives have a preference for second position (P2), preferential words and several prepositives for first position (P1), thereby marking the left boundary of the IU they are part of. In addition, recent insights in the study of Greek word order and information structure can be successfully applied to the analysis of Homeric discourse in terms of topic and focus, although a further refinement of these concepts and their application is called for (Janse forthcoming). I cannot think of a better way to conclude this paper than by illustrating its applicability with the following passage from the Κυκλώπεια. The Cyclops has just asked Odysseus to give him more wine and reveal his name (9.355), so he can give him a ξείνιον (356). Odysseus' answer is given in (29):

(29a)   Κύκλωψ |₁c εἰρωτᾷς **μ'** ὄνομα κλυτόν |₄c **αὐτὰρ ἐγώ τοι**

b   ἐξερέω |₂a **σὺ δέ μοι δὸς** ξείνιον |₄c **ὥς περ** ὑπέστης

c   Οὖτις **ἐμοί γ'** ὄνομα |₃a Οὖτίν **δέ με** κικλήσκουσιν

d   μήτηρ **ἠδὲ** πατὴρ |₃a **ἠδ' ἄλλοι** πάντες ἑταῖροι   *Od.* 9.364-7

Line (29a) starts with a fronted vocative verbalized as a separate IU. The fronting of the vocative is called for, as Odysseus has served the Cyclops three times (361) and the wine has gone to his head (περὶ φρένας ἤλυθεν οἶνος, 362). One can imagine Odysseus shouting at the Cyclops to get his attention back. The following IU contains a single clause which basically echoes the Cyclops' earlier request (καί μοι τεὸν οὔνομα εἰπέ, 355) and thus contains only presupposed and no asserted information, the noun phrase ὄνομα κλυτόν constituting a postverbal GivTop.

The third and last IU of line (29a) contains the prepositive coordinator αὐτάρ, the preferential emphatic pronoun ἐγώ and the postpositive non-emphatic pronoun τοι. What we have here is of course a classic instance of a "necessary enjambement", as the verb with which ἐγώ and τοι are syntactically connected appears as the first word of the next line. As Bakker (1990) convincingly argues, a (necessary) enjambement such as the one in example (29) is, from a cognitive-linguistic perspective, "no enjambement at all, because of the fragmented organization of oral discourse in idea units" (1990, 19). The internal structure of the IU αὐτὰρ ἐγώ τοι is one of the peculiarities of Ancient Greek, which allows such words to be combined in a separate IU. Compare the almost identical phrasing in the following example from Plato's *Symposium*, where ἔφη functions as a boundary marker (Janse 1998, 144; 2014, 27): ἀλλ' ἐγώ σοι | ἔφη | ἐρῶ (206b). Ruijgh calls such IUs "expressions thématoïdes" (1990, 230-1): the topic is here verbalized as a theme, i.e. as a left-dislocated GivTop. It is not (yet) a ConTop, as the subject of the verb in the preceding clause (εἰρωτᾷς) is not expressed by an emphatic pronoun. The second IU of line (29b), on the other hand, starts with a ConTop, σὺ δέ, which (now) contrasts with αὐτὰρ ἐγώ in the preceding line. The rest of the IU contains only presupposed information, the verb phrase δὸς ξείνιον merely echoing the Cyclops' broad-focus clause ἵνα τοι δῶ ξείνιον (356). The third IU of the line consists of a subordinate clause introduced by the prepositive subordinator ὡς followed by the postpositive particle περ and the verb ὑπέστης, which contains no asserted information.

Line (29c) begins with the name assumed by the trickster Odysseus, which will form the basis of the wonderful wordplay which is about to follow: Οὖτις (408) versus μή τις (410), and ultimately also Odysseus' μῆτις as juxtaposed to his assumed name (414). The IS of the IU, which contains an entire clause, is remarkable: the use of the emphatic pronoun ἐμοί, especially emphasized by the focus particle γε, is surprising, as there is no obvious need to emphasize the pronoun. It may be an instance of what Dik calls an "unemphatic 'emphatic' pronoun", as it is difficult to imagine an IU boundary between Οὖτις and ἐμοί γε, in which case the latter would exhibit "postpositive behavior" (Dik 2003, 537). Alternatively, it may be that ἐμοί γε echoes the emphatically preposed possessive adjective τεόν in τεὸν οὔνομα (355), perhaps to emphasize the identity of Odysseus, the trickster. This would explain the juxtaposition of ὄνομ' … ἐμόν and μῆτις in Odysseus' boast (414). In that case, it would make sense to assume an IU boundary between Οὖτις and ἐμοί γε after all, especially since the name is repeated emphatically in the IU following H (3a). The pause preceding Οὖτιν is extremely heavy, as the incontestable caesura at 3a depends not only on a hiatus, but also, and this is especially noteworthy, on the metrical lengthening of the final short vowel in ὄνομα. Despite the epanalepsis, the repeated Οὖτιν in the second clauses has to be seen as a preverbal narrow focus (and definitely not as a ConTop, let alone a GivTop).[41]

The colometry of line (29d) is tricky: the double use of ἠδέ would suggest a three-colon verse, but the coordination is between noun phrases, not clauses. Here the linguistic evidence is not sufficient to determine whether μήτηρ and ἠδὲ πατήρ constitute separate IUs, although it seems that mother-and-father are contrasted with others who call him Οὖτις. I confess that the best arguments to keep mom 'n dad in one IU are emotional rather than rational. Whether we separate them or not, the IU is a tail, i.e. a right-dislocated GivTop. The interpretation of the last part is again tricky and depends on the question whether one's parents can be one's comrades (and more importantly, if this could have been the case in Archaic Greece). I always leave the answer to my students: is it conceivable that your parents can be reckoned among your friends? In that case, we can keep ἠδ' ἄλλοι πάντες ἑταῖροι together. If not, then we have to assume a secondary caesura between ἠδ' ἄλλοι and πάντες ἑταῖροι, reducing the latter noun phrase to an apposition "and others, to wit all my comrades".[42] I like to believe that such alternative analyses are inherent in any linguistic analysis of Ancient Greek (which I would rather not call a "dead" language): linguistics can help us explain many, but unfortunately not every interpretation. As one of my other, non-Homeric, heroes says: "Information is not knowledge, knowledge is not wisdom, wisdom is not truth" (Frank Zappa in "Packard Goose").

References

LSJ = *The Online Liddell-Scott-Jones Greek-English Lexicon* <stephanus.tlg.uci.edu/lsj>

Allan, R.J. 2009. "Orale elementen in de Homerische grammatica: Intonatie-eenheid en enjambement." *Lampas* 42, 136-151.
Allan, R.J. 2014. "Changing the Topic: Topic Position in Ancient Greek Word Order." *Mnemosyne* 67, 181-213.
Allen, W.S. 1973. *Accent and Rhythm: Prosodic Features of Latin and Greek.* Cambridge: Cambridge University Press.
Bakker, E.J. 1990. "Homeric Discourse and Enjambement: A Cognitive Approach." *Transactions of the American Philological Association* 120, 1-21.
Bakker, E.J. 1997a. *Poetry in speech: Orality and Homeric discourse.* Ithaca: Cornell University Press.
Bakker, E.J. 1997b. "The Study of Homeric Discourse." In: Morris & Powell (1997), 284-304.
Bakker, E.J. 1999. "How Oral is Oral Composition?" In A. MacKay (ed.), *Signs of Orality*, 29-47. Leiden: Brill.

---

[41] I will address this and similar problems in the sequel to this paper (Janse forthcoming).

[42] One of the anonymous referees rightly referred me to the interpretation of ἄλλοι in enumerations as "as well, besides" (LSJ *s.v.* ἄλλος II.8).

Bakker, E.J. 2011. "Syntax." In Finkelberg (2011), 835-7.

Bassett, S.E. 1919. "The Theory of the Homeric Caesura According to the Extant Remains of the Ancient Doctrine." *American Journal of Philology* 40, 343-72.

Bertrand, Nicolas. 2010. *L'ordre des mots chez Homère: Structure informationnelle, localisation et progression du récit.* Paris: Université de Paris-Sorbonne [PhD thesis].

Bowie, A.M. 2013. *Homer: Odyssey Books XIII and XIV*. Cambridge: Cambridge University Press.

Bowie, A.M. 2019. *Homer: Iliad Book III*. Cambridge: Cambridge University Press.

Chafe, W. 1985. "Linguistic Differences Produced by Differences between Speaking and Writing." In D.R. Olson, N. Torrance & A. Hildyard (eds.), *Literacy, Language and Learning*, 105-23. Cambridge: Cambridge University Press.

Chafe, W. 1994. *Discourse, Consciousness, and Time*. Chicago: University of Chicago Press.

Chafe, W. 2018. *Thought-Based Linguistics: How Languages Turn Thoughts into Sounds.* Cambridge: Cambridge University Press.

Clark, M. 2004. "Formulas, Metre and Type-Scenes." In Fowler (2004), 117-38. Cambridge: Cambridge University Press.

Devine, A.M. & L.D. Stephens. 2004. *The Prosody of Greek Speech.* Oxford: Oxford University Press.

Dik, H. 1995. *Word Order in Ancient Greek: A Pragmatic Account of Word Order Variation in Herodotus.* Amsterdam: Gieben.

Dik, H. 2003. "On Unemphatic 'Emphatic' Pronouns in Greek: Nominative Pronouns in Plato and Sophocles." *Mnemosyne* 56, 535-550.

Dik, H. 2007. *Word Order in Greek Tragic Dialogue.* Oxford: Oxford University Press.

Dover, K.J. 1960. *Greek Word Order.* Cambridge: Cambridge University Press.

Edwards, M. 1970. "Homeric Speech Introductions." *Harvard Studies in Classical Philology* 74, 1-36.

Edwards, M.W. 2011a. "Bucolic Diaeresis." In Finkelberg (2011), 146-7.

Edwards, M.W. 2011b. "Meter." In Finkelberg (2011), 517-9.

van Emde Boas, E., A, Rijksbaron, L. Huitink & M. de Bakker. 2019. *The Cambridge Grammar of Classical Greek.* Cambridge: Cambridge University Press.

Finkelberg, M. 2011. *The Homer Encyclopedia.* Chichester: Wiley-Blackwell.

Foley, J.M. 2011. "Oral-Derived Text." In Finkelberg (2011), 603.

Fowler, R. (ed.). 2004. *The Cambridge Companion to Homer.* Cambridge: Cambridge University Press.

Fraenkel, E. 1932. "Kolon und Satz: Beobachtungen zur Gliederung des antiken Satzes I." *Nachrichten der Gottinger Gesellschaft der Wissenschaften* 1932, 73-92.

Fraenkel, E. 1933. "Kolon und Satz: Beobachtungen zur Gliederung des antiken Satzes II." *Nachrichten der Gottinger Gesellschaft der Wissenschaften* 1933, 319-54.

Fraenkel, E. 1965. *Noch einmal Kolon und Satz.* München: Verlag der Bayerischen Akademie der Wissenschaften.

Fränkel, H. 1926. "Der kallimachische und der homerische Hexameter." *Nachrichten der Gottinger Gesellschaft der Wissenschaften* 1926, 197-229.

Fränkel, H. 1968. "Der homerische und der kallimachische Hexameter." In: *Wege und Formen frühgriechischen Denkens*, 100-56. 3rd ed. München: Beck.

Garvie, A.F. 1994. *Homer: Odyssey Books VI-VIII.* Cambridge: Cambridge University Press.

Graziosi, B. & J. Haubold. 2010. *Homer: Iliad Book VI.* Cambridge: Cambridge University Press.

Hainsworthy, J.B. 1968. *The Flexibility of the Homeric Formula*. Oxford: Oxford University Press.

Halliday, M.A.K. 1967. "Notes on Transitivity and Theme in English. Part 2." *Journal of Linguistics* 3, 199-244.

Haug, D. 2011. "Caesura." In Finkelberg (2011), 149.

Heubeck, A. & A. Hoekstra. 1989. *A Commentary of Homer's Odyssey.* Vol. II: *Books IX-XVI.* Oxford: Oxford University Press.

Janse, M. 1990. "Wackernagel's Law." In: W. Bahner [et al.] (eds.), *Proceedings of the 14th International Congress of Linguists*, vol. 3, 2645-9. Berlin: Akademie-Verlag.

Janse, M. 1993. "The Prosodic Basis of Wackernagel's Law." In: A. Crochetière [et al.] (eds.), *Actes du 15e Congrès International des Linguistes*, Vol. 4, 19-22. Sainte-Foy: Presses de l'Université Laval.

Janse, M. 1998. "Homerische metriek: Orale poëzie in de praktijk." *Didactica Classica Gandensia* 38, 125-51.

Janse, M. 2000. "Convergence and Divergence in the Development of the Greek and Latin Clitic Pronouns." In R. Sornicola [et al.] (eds.), *Stability, Variation and Change of Word-Order Patterns over Time*, 231-258. Amsterdam: Benjamins.

Janse, M. 2003. "The Metrical Schemes of the Hexameter." *Mnemosyne* 56, 343-8.

Janse, M. 2014. *Inleiding tot de Homerische taal en metriek*. 5th ed. Ghent: Academia Press.

Janse, M. Forthcoming. "Phrasing Homer Some More: Focus on Topics, or Topics in Focus."

de Jong, I.J.F. 2012. *Homer: Iliad Book XXII.* Cambridge: Cambridge University Press.

Kiparsky, P. 1976. "Oral Poetry: Some Linguistic and Typological Considerations." In B.A. Stolz & R.S. Shannon III (eds.), *Oral Literature and the Formula*, 73-106. Ann Arbor: Center for the Coordination of Ancient and Modern Studies, University of Michigan.

Kirk, G.S. 1966. "The Structure of the Homeric Hexameter." *Yale Classical Studies* 20, 76-104.

Kirk, G.S. 1985. *The Iliad: A Commentary.* Vol. 1: *Books 1-4*. Cambridge: Cambridge University Press.

Lambrecht, K. 1996. "On the Formal and Functional Relationship between Topics and Vocatives: Evidence from French." In A. Goldberg (ed.), *Conceptual Structure, Discourse and Language*, 267–288. Stanford: CSLI Publications.

Latacz, J. (ed.). 2009. *Homers Ilias: Gesamtkommentar: Prolegomena.* 3rd ed. Berlin: De Gruyter.

Latacz, J., R. Nünlist & M. Stoevesandt. 2000. *Homers Ilias: Gesamtkommentar*. Bd. I: *Erster Gesang*, Fasz. 2: *Kommentar*. München: Saur.

Lesky, A. 1968. Homeros. *Pauly's Realencyclopädie der classischen Altertumswisschenschaft.* Supplementband XI, 687-846.

Macleod, C.W. 1982. *Homer: Iliad Book XXIV.* Cambridge: Cambridge University Press .

Matić, D. 2003. "Topic, Focus, and Discourse Structure: Ancient Greek Word Order." *Studies in Language* 27, 573-633.

Morris, I. & B. Powell (eds.). 1997. *A New Companion to Homer*. Leiden: Brill.

Nagy, G. 2004. *Homer's Text and Language*. Urbana: University of Illinois Press.

Nünlist, R. 2009. "Homerische Metrik." In Latacz (2009), 109-14.

O'Neill, E.G., Jr. 1942. "The Localization of Metrical Wordtypes in the Greek Hexameter." *Yale Classical Studies* 8, 105-78.

Porter, H.N. 1951. "The Early Greek Hexameter." *Yale Classical Studies* 12, 3-63.

Ruigh, C.J. 1990. "La place des enclitiques dans l'ordre des mots chez Homère d'après la loi de Wackemagel." In H. Eichner & H. Rix (eds.), *Sprachwissenschaft und Philologie: Jacob Wackernagel und die Indogermanistik heute*, 213-233. Wiesbaden: Reichert.

Russo, J. 1997. "The Formula." In Morris & Powell (1997), 238-60.

Rutherford, R.B. 2019. *Homer: Iliad Books XVIII.* Cambridge: Cambridge University Press.

Rutherford, R.B. 1992. *Homer: Odyssey Books XIX and XX.* Cambridge: Cambridge University Press.

Scheppers, F. 2011. *The Colon Hypotheses: Word Order, Discourse Segmentation and Discourse Coherence in ANcient Greek*. Brussels: VUBPress.

Schoubben, N. 2018. *How to Find the Origins of a Dragon? A Cognitive-Linguistic Approach towards the Protohistory of the Greek Hexameter.* Gent: Universiteit Gent [MA thesis].

Slings, S.R. 1999. "Information Unit and Metrical Unit." In I.L. Pfeiffer & S.R. Slings (eds.), *One Hundred Years of Bacchylides*, 61-75. Amsterdam: VU University Press.

Steiner, D. 2010. *Homer: Odyssey Books XVII and XVIII.* Cambridge *One Hundred Years of Bacchylides*.

Schwyzer, E. 1950. *Griechische Grammatik*. 2. Bd: *Syntax und syntaktische Stilistik.* München: Beck.

Wackernagel, J. 1892. "Über ein Gesetz der indogermanischen Wortstellung." *Indogermanische Forschungen* 1, 333-435.

West, M.L. 1982. *Greek Metre.* Oxford: Oxford University Press.

West, M.L. 1987. *Introduction to Greek Metre.* Oxford: Oxford University Press.

West, M.L. 1997. "Homer's Meter." In Morris & Powell (1997), 218-37.

Zwicky, A. 1974. "Hey, Whatsyourname." In M. La Galy [et al.] (eds.), *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society*, 787-801. Chicago: Chicago Linguistic Society.